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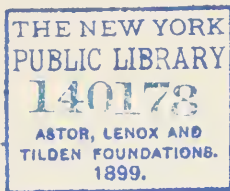
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Preface.

To assist the development of the taste for ornamental building, now prevalent in this large and increasing metropolis, as well as in the other important cities of the Union, by offering to the Architect, Builder, and Capitalist, a variety of novel designs and adaptations of the street-architecture of Rome, Florence, and Venice—is the object of the present work.

The Italian, now the fashionable style for city edifices, was the peculiar taste of the author, derived from a professional tour on the continent of Europe, long before it had superseded the pure Greek style; which, however beautiful in itself, has been proved by experience to be unproductive of any original combinations, and ill adapted to modern uses and requirements.

Small, but correct, outline *Elevations* have been adopted, as best displaying the forms and proportions of the Design: and Plans only of the outline of the Façade have been thought necessary, as the arrangement of a Plan depends entirely on the given locality. In the description of the plates, sufficient will be found to give a complete notion of each subject: and, in the introductory essay, the author has endeavored to investigate and establish some general ideas on the principles of Architectural design, in a manner he has never before seen done; together with some critical remarks on the present state of the Art in this city.

This work is not intended to supersede the assistance of the Architect, in supplying the details necessary to the execution of the Designs: but rather to furnish examples, hints, and ideas, available for various purposes; and to show, how pleasing and tasteful effects may be produced with the *minimum* of ornament and expense, by a judicious selection and combination of forms and proportions.

New York, 1855.



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Essay

On the Principles of Design in Architecture

ARCHITECTURE, compared with the rest of the Fine Arts, will be found to occupy a peculiar place. Unlike Painting, Sculpture, and Poetry, it has no standard in nature: the imitation of nature is not its object. The resemblance of columns and arches to trees and branches is merely casual and fanciful; and not their origin, nor the cause of their beauty. In architectural *ornaments*, indeed, there is an imitation of foliage and tendrils, but not a close imitation, and only in subordinate parts; and such ornaments may rather be denominated *Sculpture* called in to the aid of Architecture, as in the case of statues and bas-reliefs on the exterior of buildings.

The Fine Art, which, in its ultimate principles, bears the closest parallel with Architecture, is Music; which, also, is not founded upon the imitation of natural objects, but (as Adam Smith remarks in a posthumous Essay on the Fine Arts) contains its subject, or theme, within itself; namely, the air, or *motivo*, which is the ground-work of the composition. There is often, indeed, an apparent imitation of natural sounds and motions in the accompaniments to vocal and operatic Music; but this is only incidental and trivial, and not the cause of the beauty of Music. Music, without words, cannot express any definite

meaning ; it can only excite a feeling and frame of mind, corresponding to the ideas it is associated with. As Music, then, affects the mind through the ear by measured spaces of time, and intervals of tone, single or combined in harmony, so Architecture affects the eye, by measured spaces of lines and forms, in harmonious contrasts and proportions. The mode of producing these effects varies, of course, with the different nature of the sense excited. In Music, the perception of measures and harmonies proceeds continuously, as they flow upon the ear : in Architecture, regularity and proportion are perceived at once by a single *coup d'œil*, though the eye is subsequently entertained by going over the surface before it successively, and from different points of view, and renewing its pleasure by fresh observation. Without drawing this parallel further into needless detail, it will be clearly seen, that regularity and proportion are the essential elements of both these fine arts, and in so far the *rationale* of their effect upon the mind is the same, though addressing different senses ; while in Poetry, regularity obtains only in the outward rhythmical structure ; and in Painting and Sculpture, though they have proportions and harmonies of their own, yet *architectural* regularity would appear *formal* and unnatural.

The object of Architecture, then, is to please the eye by regularity, variety, and harmony of forms and proportions. As Music is founded upon mathematics, in the intervals of the scale, and in the harmonies of chords, so Architecture is founded upon, is the relative Fine Art of, Geometry. Geometry defines right angles, straight lines, and curves : Architecture adopts them as “ things of beauty ;” and by

their varied arrangement creates a new sense of pleasure, and has the power of affecting the mind with ideas and images of airy grace, or severe sublimity.

But Architecture has another peculiarity to distinguish it from the other Fine Arts ; it is a *useful* Art as well. It owes its origin and intention, the nature and primary form of its leading features to Utility ; it can never desert an apparent or possible utility, at least ; its very beauty consists in the union of utility and beauty. In this respect Architecture may be compared to costume. Dress and shelter are natural necessities. Fit and agreeable forms and ornaments applied to these necessities raise them into the rank of refined Arts. The arrangement of drapery is a part, and no small one, of Painting and Sculpture. As Architecture, therefore, is founded upon utility, *Utility* should prescribe what is wanted, and *Beauty* should supply that want in the most appropriate manner.

Without entering upon the question of the origin of our notion of the Beautiful, it will be generally agreed, that there is an eye for visible beauty, as there is an ear for music, without the natural possession and cultivation of which, in some degree, it is impossible to entertain or communicate any intelligible ideas upon the subject. Genius and taste may be improved, but can hardly be infused into minds naturally deficient in organic sensibility towards their objects. We believe, that forms and colors give a positive pleasure *sui generis* to the eye. Color first pleases children, Form the more experienced and cultivated mind. It is through the perception of color, light and shade at least, that we originally learn

to distinguish forms ; and the brightest colors will naturally be most attractive to the infant eye. But the first efforts of the childish pencil will generally be found to be houses and ships, and geometrical elevations, and profiles of these, and straight lines rather than the flowing curves of natural objects ; and if trees are attempted by a child they will be made perfectly upright and symmetrical, which indeed is the vulgar ideal of the beauty of a tree among adults, ignorant of the principles of the picturesque. All this tends to prove that regular and symmetrical forms, even those of the common geometrical superficies, have a natural charm for the eye, increased, of course, by the intellectual perception of their truth and exactness. As experience advances, certain forms and arrangements will be found to please more than others. What then are the causes of this pleasure, or in other words, what are the elements of architectural beauty ?

On an attentive analysis, we would enumerate them as follows :

1. SYMMETRY, or an equal arrangement of parts on each side of a centre line. This principle prevails, and is equally the source of beauty, in the organization of all the higher classes of animated beings ; and, united with variety and beauty of outline, pre-eminently in the human form, which was the favorite type of a column, among the old writers on architecture.

Symmetry, in architecture, necessarily includes

2. PERPENDICULARITY of supports, and
3. HORIZONTALITY of entablatures, or the parts supported. The inclined lines of a pyramid, a Vitruvian door,

or a Gothic buttress, are only occasional exceptions to this rule.

4. PROPORTION of the parts to the whole, and of the subordinate parts to the principal ones, in their several widths and heights.

5. VARIETY, contrasting with and heightening the effect of *uniformity*. Under variety we may class *curved* lines, whether on the plan or elevation, and perhaps *ornament* in general, the chief use of which is to vary a plain surface.

6. UTILITY, and apparent durability, to satisfy the reason as well as the imagination. Straight lines, and right angles, equally belong to utility and beauty. A building, composed of curved lines only, would appear unfit for stone-work ; in wood-work we admire the curved lines of chairs, and other furniture.

7. ASSOCIATION, either with the particular forms we have most seen and habitually admired, or with reminiscences of the classical or romantic ages, or of the revivals of learning and civilization. For this reason, Egyptian, Persian, Hindoo and Chinese architecture have no beauty of association with us, though the two former have great intrinsic beauty, and were the precursors of the Grecian orders.

As the three first of these principles are fixed elementary essentials, and the two last easily observed by ordinary attention, it is in the *proportion* of the parts, and the *variety* of their arrangement, that the practical principles of design will be found to consist. In proportion, we believe, will be discovered the magic charm of the most exquisite and celebrated models of the art. To test this :

make them wider or higher, in the whole or in the parts, or displace a single important feature, and they will be spoiled. But change the style and ornaments, or strip all ornaments away, and the beauty of the design, the beauty of proportion will still be left. On the other hand, we may often notice buildings, otherwise unobjectionable in form, which injudicious parsimony of expense, the self-will of the employer, or the incompetence of the architect, have "curtailed of their fair proportions," and consequently of their beauty.

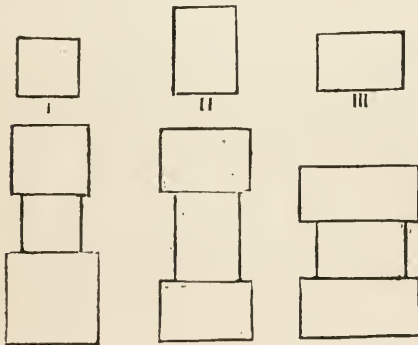
We have not included Composition, or Harmony, as *analytical* elements of architectural beauty. Composition in Architecture, except as including originality in the arrangement of lines and forms, is nearly the same as the proportioning of the parts to the whole ; and Harmony is the result and general effect of Composition and Proportion combined.

Thus it would appear, if the above analysis be correct, that Proportion is the chief element of Beauty, and, in common language, nearly synonymous with it, in Architecture as well as in Sculpture : in both of which arts Quantity and Outline of Form are the means of producing effect. But what is Proportion ? is it anything absolute and definite, or mere arbitrary fancy, or association ?

It is the general idea of unprofessional persons, that the proportions of architectural compositions, the orders, &c., are settled and perfect ; *rules* which the professor has only to follow implicitly, to produce a certain good effect. This idea is totally incorrect. Some general proportions of the orders were, indeed, observed by the ancients, in making the Doric low, the Corinthian lofty, and the Ionic

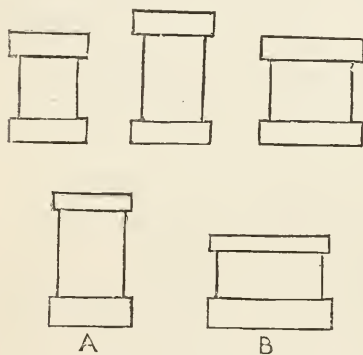
order a medium between the two ; they had also general rules, or practices, in arranging the distances between the columns. But when we come to particular and absolute proportions of the several parts, no two instances of any one order, we believe, can be found exactly alike ; and great variation of ornaments and mouldings was indulged in according to the taste and invention of the architect, and to the size, plan, and site of his building, whether temple, forum, amphitheatre, or domestic residence. Absolute proportions, therefore, were not the cause of the beauty of the ancient classical remains. But neither is proportion a mere matter of whim and caprice ; but, like good taste, according to the definition of Burke, the result of *feeling* and *judgment* in the mind of the artist. Even the etymology of the word implies the idea of fitness and relation to something out of itself : what is good proportion for one thing, is bad for another : a colonnade requires length, a spire the greater height : the proportions of a child, a man, a woman, of a Venus, a Hercules, a Juno—all differ, yet are all beautiful in their place.

The nature and beauty of proportion may be here illustrated by a few simple diagrams in a familiar man-



ner. In the first place we may remark that an exact square (1) is not so agreeable a shape for a picture, tablet, pedestal, &c., as the upright or oblong parallelograms (2) and (3), because

wanting the variety and contrast of proportion of the latter. If we now proceed to add a base and capital to the above figures, we shall perceive that the addition of another square or cube, or another oblong parallelogram over and under the figures 2 and 3 respectively, will produce no beauty whatever; but that our capitals and bases must be adopted of a different height from that of our pedestal, and as they are subsidiary features, they must be *less* in height. But if we try equal heights for both, the effect will not be pleasing, consequently one must be less in height than the other, and to obtain solidity of structure the base ought to be the highest,



as in figures *a* and *b*.

Here we have a pleasing and well proportioned outline (*a*) for a pedestal to a statue, lamp, &c., or, a little heightened, for a gate-post, chimney, &c., and in (*b*) for a reclining or equestrian statue, or for a tribune, or

tomb. If the cornice should be subdivided into mouldings and the base into plinths, similar divisions into unequal heights and projections are usually made, and are found the most pleasing. This same principle applies equally to proportions of width in the elevation of a building with a centre and wings, where main divisions into *equal* parts must be avoided. But windows, columns, and smaller subdivisions of width, as in the modillions and dentils of

cornices, &c., must be placed at equal distances, or no conformity of design will be obtained. Our first principle requires equal distances on each side of a centre line. And here a curious question occurs to us, which we have never seen noticed before : Why are not equal heights, as well as equal widths, required to please the eye? Why are not 5 equal and similar stories in height required to please, as well as 5 equal windows, at equal *widths* apart? That equality of heights is *not* pleasing, we have just seen exhibited in our diagrams: on the contrary, variety in heights would appear just as agreeable as uniformity in widths; it is perhaps the contrast between the two that produces the most complete satisfaction. The reason of this may depend upon our single vision with two eyes, which are in a horizontal, not a perpendicular line, so that we see to a greater extent in width than in height, and can more readily appreciate equal widths than we can equal heights. Utility, also, may have something to do with the question, since equal widths, on a plan, are the most convenient, while equal heights are indifferent. Or it may be some secret sense of analogy between the object contemplated and our own frame, since, as we before pointed out, man and all the higher animals are symmetrically formed on each side of a centre line in width, but not in height; the parts from below, upwards, are exceedingly varied in form and proportion. If these ideas are well founded, it may be deduced as a corollary, that the more equal our divisions are on the plan, and the more varied on the elevation, the greater will be the variety of proportion and the beauty produced. Equal widths and heights produce only squares, which have no variety; like unisons in

music, which, however multiplied, produce no harmony. Harmony arises from the junction and simultaneous perception of intervals variously proportioned to each other.

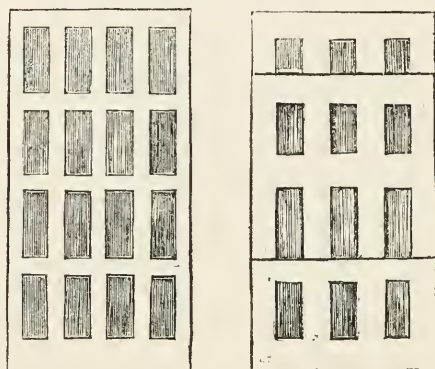
If we now examine the proportions of the orders, we shall see that the capital, though sometimes higher than the base, is seldom, if ever, of exactly the same height. Divide an order, with pedestals to it, into pedestal, column, and entablature, and we shall have very nearly the same divisions as in our example (*a*). Proceeding to the front of a house of three stories, the first or ground story will look best when lower than the second; the second should have the greatest height, while the third or upper story should be lower than the first. The heights of the windows, of course, will be similarly proportioned to the several stories. In a house of four stories, we have the choice of keeping the second story the highest as before, and introducing an extra story, the same, or a little less, in height than the ground story, keeping the upper, or attie, the smallest, as before. Or we may make the first story the highest, and the two next progressively smaller, and by the help of cornices or string courses separate the upper and lower stories from the two middle ones, so as to give the latter the effect of one compartment, which will again produce the three-fold division of our diagram. This shows us the beauty and utility of string courses, and cornices, in creating harmonious proportions in the elevations of city buildings, which, from economy of ground plot, are necessarily too narrow for a good proportion, and would appear likely to fall unless propped up by their neighbours. If a fifth story is required, we must add an additional string course, dado, or

cornice between the second and third, or the third and fourth stories, in order to preserve an agreeable proportion. In a house of six stories, semicircular window heads and ornamented dressings must be had recourse to on one or other of the lower stories, to counteract the monotony of the repetition of so many square-headed apertures. Beyond six stories above the ground, a building of the ordinary width of a single house may be raised for purposes of utility, but not as a piece of *architecture*. The too great number of stories, crowded windows, and want of string courses, are the prevailing faults of the City Architecture of New York.

The wall of a house is composed of piers and windows, or, as they are technically called, solids and voids ; and to produce real as well as apparent solidity, the solid parts should preponderate ; the piers should be wider near the windows. In important edifices, with ample space on the ground plan, this old and excellent rule is generally observed ; but in dwelling-houses and stores it is as generally violated. In Italy this indispensable proportion is observed in the meanest building. New York is in the same latitude as Naples : why should more light be required in one place than the other ? Why should our apertures be as wide as those used in the murky atmosphere of London ? That it is merely a habit, and not a need, we are convinced, from the general practice of stopping out at least half of the light by blinds and curtains. In the smaller class of plain brick dwellings recently erected in this city, we have been pleased to see narrower windows used ; but in first and second class stone-fronted dwellings the width and height of the apertures are far too

great for the solid part of the wall. Architraves, too, are generally made wider than necessary ; and architraves seem to belong to the window, and subtract from the width of the pier.

To enforce the truth of the above remarks by a visible example, we add the annexed diagrams, representing *good* and *bad* proportions, which we think will be sufficiently self-evident without our distinguishing them.



In very deep stores, where large apertures for light are absolutely indispensable, we would recommend the general adoption of *arched* heads, lately introduced. A series of arches looks *best* when the piers are narrower than the apertures ; arches give greater real and apparent strength of construction, and greater solid space above them, than square apertures of the same height. The invention of the arch we regard as the crowning glory of architectural beauty and construction—the discovery of a new world of domes and vaulted ceilings. The beauty of arches we believe to arise from their partaking of as much of the line of beauty, the serpentine line, as will continuously

flow out of, and reunite with, perpendicular lines. The beauty of the arch owes something also to the principle of utility and ingenuity, *la difficulté vaincue*. The natural arch of a rock conveys a sense of danger, as well as of sublimity: but in art it affords unalloyed pleasure; its keystone having become the proverbial emblem of stability. As the circle is the most perfect geometrical form, the semicircular is the most perfect and beautiful of arches; the elliptical, the oblique section of the circular cylinder, the next. The pointed arch is pleasing, but void of continuity and strength. Segmental arches are good only in basement stories, bridges, &c. If to the Greeks we owe the orders, or a triple system of well-proportioned perpendicular supports and horizontal entablatures, to the Romans we owe the use, if not the invention of the pier and arch; as well as the junction of the two in the arcade, with half columns between the piers. The judicious intermixture of straight and circular-headed windows, with horizontal cornices, and occasional supporting columns and pilasters in the piers, will be found the means of producing the richest and most effective embellishment of street and city architecture.

To return to the point we digressed from. Some writers (Mr. Gwilt, the author of the *Encyclopædia of Architecture*, among the number) have advocated strict arithmetical or *harmonic* proportion in the widths, breadths, and heights of the main divisions of the plan, or elevation, of rooms, doors, windows, &c. That is, that a room, door, or window, should be exactly as 1 to $1\frac{1}{2}$, 1 to 2, 3 to 4, &c. This is often a very convenient arrangement to form subdivisions of windows and piers, ceilings, pannels, &c., and an approxi-

mation to such proportion is often worth adopting. But the proof that strict harmonic proportion is not the source of beauty is this: that the eye is incapable of perceiving it; it could only be proved by the compasses or measuring rod. In music the divisions and proportions of time and tone must be all but mathematically perfect and true, in order to satisfy a correct ear; but the eye, from its limited point of view, could not detect a default or excess of several inches or feet from strict harmonic proportion. A safer rule to follow is the old universal golden maxim, "*Avoid extremes.*" A building which is obviously too tall or too low as a whole, or in any essential parts, can seldom redeem such an objection by extraneous beauty. The *medium* of form is a cause of beauty in painting and sculpture, according to Reynolds.

Architecture has many other general principles in common with her sister arts, especially that of painting; such as contrast, light and shade, richness and repose, a balance of parts, triangular and pyramidal grouping, bringing forward some parts of the composition and keeping others back, &c., and more than all others, as being a useful art, is it subject to the jurisdiction of common sense, which, according to Dr. Johnson, is not to be set at naught even in the works of imagination. This last principle was ably advocated by our friend, the late Mr. Loudon, throughout all his excellent architectural works. Columns, with nothing of sufficient importance to support, sham pediments in the centre of long ranges of building roofed the contrary way, steeples riding astride upon the apex of roofs,—are all instances of the violation of this important principle.

Having proved that certain *proportions* are more

pleasing than others, we come next to the question, whether any particular forms are *per se* essentially more agreeable? This we cannot answer in the affirmative, except in the arts of painting and sculpture, where nature is the standard. In nature there are superior races of animals, and superior individual types of each race, and it is universally agreed, that the horse is the most elegant in shape of hoofed quadrupeds, the greyhound of dogs, the swan of birds, the rose and honeysuckle of flowers. The circumstance of all these examples, and the human form the most, partaking most eminently of the line of beauty, is to us a proof that that line is the most agreeable to the eye; whether, as possessing more variety and appearance of motion, or because exciting its physical sensibility in a more agreeable manner. For we must not forget that seeing and hearing are physical senses, and that their relative Fine Arts are sensual pleasures, though of the purest kind, and however refined by the intellect and the imagination. But the original adoption of particular straight or curved lines in architecture, when not suggested by the nature of the materials, was probably arbitrary and accidental; and we think it would be impossible to prove the intrinsic superiority of the forms of any one style of architecture over another. In this point, we believe the principal cause of our preference is association and habit. It would be as difficult to maintain the superiority of one style of music over another, the German or the Italian, for example: the controversy on which subject was justly decided by Rousseau, in saying that each was the best to its own nation. The style of the most cultivated nations, and those which have the

most national taste for any particular art, may, however, *à priori*, be *presumed* to be the best ; which inference, as it gives the palm to Italy and Germany in music, would yield the superiority in architecture to ancient Greece and modern Italy.

The principles of proportion and symmetrical composition are common to every style ; but each particular style has its own modes of effecting its purposes and principles of development, which have become *rules* for that style. We must in the main follow the leading characteristics of any style we adopt, and its particular mode of ornament in its details. Styles of unkindred origin must not be confounded together. “It is essential to an architectural structure,” says a writer in the Penny Cyclopædia, “that the general arrangement, and the ornaments should have a unity of character, and be referable to some one model.” It would be as great a solecism in literature to compose a sentence, half in one language and half in another, as it is to mix up in one composition two different styles of architecture. If we compare the Grecian and the Gothic styles, we shall immediately perceive the striking contrasts of their aims and effect. The Grecian consists of a few simple parts, and broad divisions ; the Gothic is complicated in plan, and infinitely subdivided into minute parts. In the one, horizontal lines, window-heads, and entablatures prevail ; in the other, perpendicular lines, pointed arches, and pinnacles. The Grecian admits of none but right angles, save one very obtuse angle in the pediment ; the Gothic avoids right angles, as much as possible, even on its plan, and destroys the appearance of them on the elevation, by the preponderance of acute

angled pediments and pannel-heads : Grecian ornament is upright and formal, or in regular scrolls ; Gothic totally irregular, and creeping, like a vine : the pure Grecian admits of only flat square-pannelled ceilings ; the Gothic spreads out its vaulted-arches, and fan-like tracery, "scooped into ten thousand cells," of every imaginable shape, derived from the intricate geometry of its plan. Nothing, then, but an attentive study of these different styles, can prevent the artist from running into a jumble of their principles and modes, (such as the mixture of Gothic label-mouldings and Grecian consoles,) which can never have a good effect, independently of their inconsistency ; while, to the connoisseur, it will always appear the result of ignorance and incompetence.

In the progress of the primitive races, architecture necessarily assumed a *national* character, originating from the peculiar climate, the materials furnished, and the relative degree of refinement and imagination of each nation. But in modern times, after the lapse of ages of civilization, and intermediate barbarism, and the consequent corruptions, revivals, and imitations of styles, the production of an original and national architecture is no longer possible. Even if forms of elegance superior to Greece and Rome, and the purest styles of the middle ages, could be invented, they would not be thought so, wanting the old classical or romantic associations. But indeed no really original system of forms, columns and entablatures, piers and arches, could now be invented ; it would inevitably have more of borrowed than of original in it. The variety of lines and forms is very soon exhausted. Straight and semicircular, or elliptical, are all that sound construc-

tion and beauty admit. The serpentine line, the line of beauty in sculpture and painting, is only admissible in ornaments and the profile of mouldings (except, we may say, in Gothic and corrupt Italian pediments). Even where unbounded scope would seem to be given to produce variety of lines and forms, in the patterns of paper hangings, drapery, and female dresses, original invention is extremely limited, and every possible variety may be classed under three species : spotted, striped, or running patterns, or combinations of these. But even a regular arrangement of spots, stars, or rosettes, must run in straight lines, and suggest straight lines to the imagination ; and even running patterns on repetition appear to occupy rectangular spaces ; so that all formal design is ultimately reduced to straight and curved lines, as its simple elements.

The utmost, therefore, that the architect or designer can do in the present advanced age of art, is to select some appropriate and pure style, and recombine and imitate its best elements and features. Though architecture thus appears to be the least capable of originality of all the Fine Arts, yet even in selecting and combining there is ample scope for taste and genius. It was surely original genius in Michael Angelo, to conceive the idea of raising the dome of the Pantheon above the Basilica of St. Peter's. Whatever site may be selected for an edifice will most probably present some peculiarity which must be consulted, and may often be taken advantage of in suggesting some novel and characteristic disposition. Requirements, limits, and obstructions of various kinds, may lead to invention and beauty, in seeking to overcome them. If we must imitate, there is no necessity for direct plagiarism.

Whatever style or main idea we adopt, we must suit the accessories to it ; we must fit even a borrowed design to its place and dimensions ; and this will be better done in the end by a thorough remodelling of the idea into a perfect and consistent whole. It requires *judgment* to choose the best from what is before us,—*taste* to make a *cento* of elegant extracts from the thoughts of others.

In the application of the orders to street architecture we would advocate great freedom, especially with half or three-quarter columns, or pilasters engaged in a wall. Here we should not scruple to omit an architrave, frieze, or cornice, and to regulate the entire proportions, as may best suit the part of the design in which they are introduced. In small columns, a fancy capital of few and simple parts, in a taste corresponding with the general design, is far preferable to a miniature reduction of some classical authority.

The present age is distinguished, in our opinion, by too cosmopolitan a taste for variety of styles, with a view to the production of novelty and picturesqueness. Buildings of totally opposite styles, when in close proximity, destroy each other's effect, and where styles are much varied, give the appearance of a city in masquerade. For our own taste, we should eschew all impure, mixed, and transition styles, and for city architecture should adopt the Italian, and for rural the Italian or Gothic, according to the kind and situation of the building. The Gothic, as our friend E. B. Lamb observes, in his "Studies of English Domestic Architecture," is the truly national English style, originating from our Norman, if not from our Anglo-Saxon ancestors, and, as such, has the strongest claim to be adopted

by the cis-atlantic descendants of the mother country. For churches and colleges, or schools, country mansions and cottages, nothing can be more eligible, either in point of convenience or beauty ; but for general street architecture and miscellaneous public buildings, it will be found irreconcilable with modern requirements, nor could characteristic models of such an application of the style be derived from antiquity, the town buildings of the middle ages being generally constructed of wood. The few attempts for private dwellings and stores in this style recently made in this city, have, in our opinion, completely failed, not to mention their incorrectness of detail ; while they have unfortunately afforded examples of window-dressings, &c., for the uninstructed to copy from, and mix up incongruously with other styles.

Street architecture, the more direct object of this work, has peculiar features and requisites, which it is worth while to dwell upon for a moment. A street building presents most often a mere front, and this front can only be viewed directly from the limited distance of the opposite side of the street, or obliquely as we pass along. A more distant direct view of a street building in which the opposite houses are supposed by the draughtsman to be removed away, gives no idea of its real effect. Such views can never do justice to the architect, for surely a flat mass of building, which a street front must necessarily be, was never intended to stand isolated in an open square, as it is represented. But truth and nature are never deserted with advantage ; views of street buildings should always be taken *obliquely*, and show the neighbouring houses as well, because they in fact assist to support them, and form part of

the general effect ; and if well designed, their heights and projections were regulated so as to look best from an oblique point of view. Windows are the main features of street architecture, and on the forms, grouping, and decoration of these, the originality and beauty of the design principally depend. Where there are three windows in width, a wider and more ornamented centre window may be introduced with advantage. But this should be a Venetian window with two narrowed side lights : *double* windows, confusing their architraves together, are very objectionable, as placing a mullion or solid part in the centre line of the elevation. But, indeed, all mullions or divisions in windows are Gothic in their principle, and discordant with Grecian or Italian design ; as are also semicircular-headed windows divided into two smaller semicircles by the sash-frame, although examples, not worthy of adoption, of these may be seen in Florence and Venice. Where there are five or more windows in width, we would not recommend a richer centre window ; but would preserve them all of equal heights. It is better to extend the outer windows as near as possible to the party walls than to squeeze them too close together ; except in a corner house, where a wide pier at the angle is required both for strength and appearance ; although this rule is sadly violated in this city. Architraves seem to add to the width of the windows, and detract from that of the piers ; therefore they should not be, as they too frequently are, wider than necessary. We may here insert our objection to *heavy* dressings and decorations of all kinds. We attribute the prevalence of them to a remnant of Grecian taste ; but Roman and Italian decorations and dressings should be far lighter,

to correspond to the taller and more elegant orders to which they are attached.

The next important feature of street architecture is the cornice—and, under this head, we wish to impress upon the public and the profession the beauty and value of string-courses and horizontal lines in every building. In point of utility, they serve as an external real and apparent bond to the wall, like the internal bond-timber and plates for the floors, while they divide the stories of the house into whatever heights may best suit the composition, and counteract the excessive height of numerous stories; and also assist the perspective effect, when viewed sideways, in carrying the eye in easy and agreeable gradations to the *point of sight*; instead of presenting a single acute triangular form from the foundation to the summit of the building. It is true, the window heads and sills make this division in some degree, but in broken projections, and not continuously. In general, where window sills meet each other very nearly, it is far better to join them entirely by a continued fascia, or similar mouldings of the sill, recessed back an inch or less. It is difficult to imagine how such a simple and effective feature as a continued window-sill or string-course should have never been in general use in this city. The commonest houses in Europe of three or more stories will always have one, or some horizontal band of a similar nature; in Italy there is often one to every story, and never more than three stories without one.

We are glad to see projecting porticoes to dwelling-houses superseded by the very elegant and convenient recessed porches, now prevalent. We can suggest nothing more tasteful than the Italian arched entrance, with

enriched bracket and cornice, of which the modern portion of the city exhibits various unexceptionable examples. If projecting porticoes are ever used, we should prefer the closed to the open ones, and only to single mansions, where they may have some peculiar characteristic intention, in connexion with the general design, in obtaining a *distingué* effect. In a long row of houses a series of similar projecting porticoes has an effect approaching to the ridiculous.

It is a pity that, owing to the sale of land in separate lots, built upon according to the individual taste of the owner, New York will perhaps never be able to boast of a handsome Square. In streets, a row of similar houses when long becomes monotonous; the more variety, the greater the picturesqueness. But squares require uniformity of architecture to complete the effect of the regular plot of ground they enclose. In this situation houses better or worse than each other, one up and one down, have the effect of a ragged regiment of recruits, compared with a well-drilled line. In squares, the corner houses of the block may be higher and more decorated than the rest; but a more decorated centre compartment is improper, as implying the false idea of a single building, with an entrance in the centre.

Within the last few years the city of New York has made great advances in architectural taste and display, both in public and private edifices. Fifteen years ago the cities of Philadelphia and Baltimore might perhaps have justly claimed superiority in this respect. But the greater comparative increase of population, commerce, and wealth of the "Empire" city have since then manifested them-

selves externally in the splendor of the stores and residences of its most eminent merchants, which are now setting the example of similar magnificence in the other principal cities of the Union. At the distance of time just mentioned, it happened to be the task of the present writer to publish a short "Critical View of the Architecture of New York," in "Loudon's Architectural Magazine," since merged in the "Engineer's and Architect's Journal." At that time the new Custom-house and Exchange were unfinished, the mean-looking old Trinity Church still standing, and the City Hall, and the Centre Street Prison, the most striking objects of commendation. Of private buildings, only the interiors of a few stores had any pretensions to taste; while a few plain brick and stone mansions about Bond Street, and Washington Square, and the marble row in Lafayette Place, were the best specimens of private residences. Although the Exchange and Custom-house have not obtained praise except for size and substantiality (the interior of the latter, however, is only too rich and elegant for its purpose), the erection of the splendid new Trinity Church has formed an era, as well as a model, in ecclesiastical architecture, the need of which was pointed out in the criticism above mentioned. The only fault we can find in this beautiful work (most probably not the architect's) is, that the spire should have been a little higher and more tapering.

But it is in its hotels, stores, and private residences, that this city has advanced, as some questionably assert, to a degree of extravagance. Among them, we would specify and commend as most to our individual taste:—Delmonico's, near the Bowling Green, the earliest introduction,

we believe, of Italian street architecture ; the Metropolitan, which we consider the chastest and best-proportioned Hotel-front yet erected ; Stewart's store, the chastest and best-proportioned of stores, except its injudicious division into five nearly equal portions in width ; the very meritorious Trinity-building, and its neighbouring block ; the Harmony-building ; the Insurance-building in Wall street, perhaps the most beautiful Italian structure in the city, as well as a smaller neighbouring one to the west ; the Seamen's Saving Bank ; the Seventh Ward Bank in Pearl street ; the Ocean Bank in Greenwich street, though too much cut up by perpendicular projections and recesses, and almost spoilt by a sham pediment out of place ; and the Bowery Savings Bank. Among the new private houses and mansions, we most admire the two earliest precursors in the Italian style, one at the S. E. corner of 15th street and 5th avenue, and the other in 16th street west of 5th avenue, with the fountain in the fore-court ; the mansion at the N. E. corner of 5th avenue and West 21st street ; a dwelling-house at the N. W. corner of Madison square, the third house from the 5th avenue, with a belvedere on the roof, the most tasteful, in our opinion, of that size yet built ; two houses with projecting Roman Doric porches, at the N. E. corner of 18th street and 5th avenue ; a large mansion at the S. E. corner of 16th street and 5th avenue ; the second house from the N. W. corner of 14th street and 5th avenue, with circular-headed windows in the Florentine style ; and, perhaps the purest specimen of the Italian *palazzo* in the whole city, a mansion near the south end of the east side of University Place.

The above-mentioned buildings we believe will secure the lasting approbation of the best judges, and we would confidently recommend them as the best mode for imitation yet furnished in this country, as well as appeal to them ourselves as exemplifications of the principles we have laid down in this essay, particularly in the proportioning of the solid to the void parts of the front, and in the introduction of sufficient horizontal lines into the composition; and we hope that the candour with which we have commended the productions of fellow artists, all personally, and almost all nominally unknown to us, will free us from the imputation of invidiousness, in passing over without notice many other works of equal pretension, which from their over-crowded windows, want of string courses, incorrectness or confusion of styles, contradict all the principles of design we have been advocating in this volume.

A word or two as to the materials used in this city, and their relative claims for preference. Of these the Connecticut or Jersey sandstone looks best in a Gothic building, though the darkness of its hue prevents the projections and carvings from exhibiting their due light and shade. For this reason, in all other buildings but Gothic churches we prefer it mixed with red brick, as it harmonizes so well when thus united, and appears lighter itself by the contrast. We also strongly recommend it for the Elizabethan style, in schools, colleges, suburban and rural villas; in which last subjects we are surprised that no travelled gentleman of taste, who has seen its good effect in the old country, should yet have adopted it. The Quincy granite, being incapable of minute carving, is

unavailable for any but massive and plain works. But we should rejoice to see the white marble, though more expensive than the sandstone, yet the most beautiful of all materials (except that it will not harmonize with red brick), more generally adopted; and hope that the example of Stewart's, and Bowen's and McNamee's stores, and the St. Nicholas Hotel, &c., will be followed in all other first-class edifices. Neat and chaste as the brown sandstone appears, the testimony of experience, and the evidence of our own eyes in the older buildings of that material, proves its liability to crumble and decay from the effects of the atmosphere in a short period of years, as well as, we fancy, to turn darker by time; whereas marble furnishes an almost imperishable material, which can be cleaned or refaced when discoloured, as it has lately been done at the City Hall.

Cast iron has lately been extensively used in columns, pilasters, and beams of stone fronts, and sometimes in entire fronts. It requires time to demonstrate the relative value and eligibility of this material in the end. Besides the objection to all imitations of superior substances, there is a necessary flatness and stiffness in all cast, compared with carved, foliage and ornament. But as it bids fair to be extensively used, it may be as well to point out the most advantageous forms it should adopt; which, we conceive, should be a medium between the solidity of stone and a mere framing to glass, which was first attempted. The designs in this book which could be best converted to the purpose are No. 2, Plate 1, and Plate 2, and the store on Plate 5; and, in addition, we would recommend an imitation of that side of the Piazza of St. Mark's at Venice,

which is composed of several stories of small pillars and arches, with deep entablatures between. Entire circular windows would look well on the uppermost story, and have already been adopted in such designs.

We have just noticed the absence of horizontal and the unnecessary insertion of perpendicular lines as the prevalent fault of street architecture. Another still more objectionable practice has arisen, from the effort to disguise numerous stories of windows, in the recent Grecian style, namely, of making the windows a mere blank space between wide pilasters, and the space between the heads of the lower and the sills of the upper windows, a sort of sunk frieze, with nothing to support it. Another equal or worse anomaly is, the *Procrustean* stretching out of a single window architrave, so as to make it serve for two windows, one above another. All these expedients are merely the pursuit of novelty, at the expense of beauty, propriety, good construction, and common sense.

In the descriptions accompanying our designs, we have made other particular observations of this kind, wherever instances occurred to suggest them ; but, before we conclude this short and imperfect essay, we would recur to our starting point, where we defined Proportion, the chief part of the Art of Design, as depending upon taste and judgment, and a sense of harmony in a cultivated eye ; as a taste in music arises from a cultivated ear. With this view, we would strongly inculcate the necessity of *cultivating an eye for proportion*, and, as the best mode of so doing, we would recommend the practice of designing and sketching by the eye alone, and from memory, without ruler or compasses : never forgetting the perspective effect

in execution. Nothing but the practice of drawing by the eye alone, forces the eye to notice proportion and form. The nearer, also, we bring our designs to relative correctness in the first sketch, the easier it can be drawn out to correct admeasurement. The Grecian and Italian architects were often painters and sculptors as well; painters are, in general, the best judges of architecture; and the more an architect feels *as an artist*, and the greater general knowledge of the fine arts he possesses, the greater evidence will his designs present of invention, judgment, and taste. It is the general advancement of architectural taste that has been the principal aim of this little work: and we shall be less pleased to see our own designs servilely copied, than we shall be to see original and better designs constructed on the principles which we have advocated, and believe to be founded on truth.

The author cannot better conclude, than by quoting the last sentence of his former criticism, written in 1838, in which he ventured upon the prophecy, already half fulfilled: "that the recent evidences of improving taste and public spirit of the citizens, afford the most certain promise, that, at some future day, New York will equal in splendour, as well as in prosperity, the proudest cities of the old world."



Description of the Plates.

DESCRIPTION OF THE PLATES.

GENERAL OBSERVATIONS.

THE designs are drawn of dimensions suited to first class buildings of their kind, and the heights of stories proportioned to the width of the front, so that, if required to be reduced in size, little or no alteration in proportion will be necessary. The basement stories are kept lower than usual above the ground, in order not to injure the effect of the geometrical elevations: in execution they might be raised higher without detriment. In forming a judgment of the designs, it must be borne in mind, that the effect of a single street house can never be so good as when apparently supported by and contrasted with, an adjoining building on one or both sides. The appearance of too great height, which it presents when alone, is completely removed, when forming part of a long range of buildings. For this reason, an additional story might be added (beneath the attic) to most of the street elevations, without injuring their effect in execution. Outline ground plans are given, where required, to show the projections of the elevations, and shadowing in fine lines is occasionally added, to distinguish columns and other circular parts from pilasters and flat surfaces. Chimneys have often been omitted, as standing too far

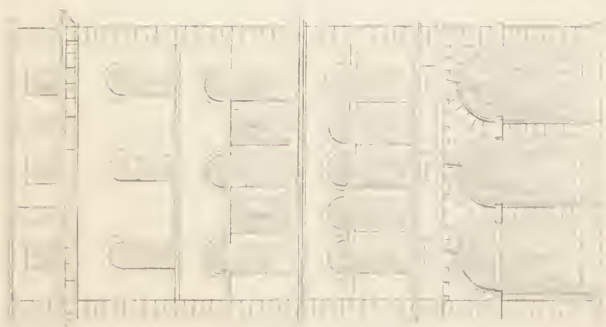
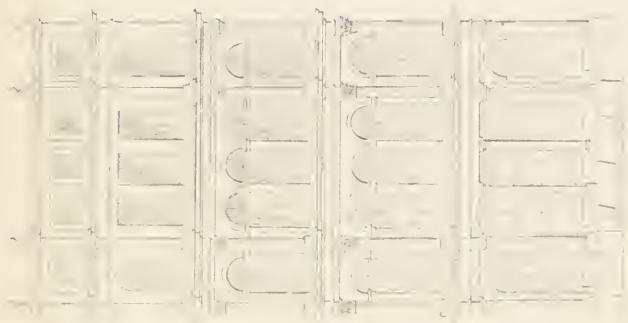
back to be visible in the front view. The returns of all cornices and string courses have been drawn, for the sake of showing their profiles, and completing the symmetry of the designs. In execution, where this cannot be done, we think it preferable, in general, to cut them off perpendicularly on the line of the party-wall, rather than to make the cornice return within itself, as it were, against a plain fascia. But it would greatly increase the beauty of street architecture, if neighbours would mutually agree to suffer the *upper* cornice, at least, to return over each other's premises, or against the adjoining front wall: it might be subsequently cut off, if found objectionable. Perhaps this is the best place to remark upon the practice, justly objected to by a critic in "Putnam's Magazine," of disfiguring the fronts of stores and public buildings, by enormous, tasteless, and superfluous sign-boards. It is utterly throwing money away on architectural decoration, if every feature is to be disguised and obliterated from notice by masses of black board and gold letter. The plain parts of the wall which they occupy are absolutely necessary to give relief to the dressings and ornaments. Nothing but the *name* of a firm is really indispensable: the *business* may be denoted best by a sample of goods in the window, or the glass door. But to make our streets nothing but a newspaper column of advertisements, is not only the worst of taste, but quackery and puffing, which, when universally adopted, defeats itself, and has no effect upon the passengers but annoyance and distraction. The only proper place for inscriptions is the frieze over the store-front, or a tablet between the windows of the second and third stories, and

these should be painted in stone colour to match the building, as if sunk in the stone ; or, if in raised letters, coloured bronze. In public buildings, and suites of offices, the tenants should only be allowed to affix their names and designation on the blinds of their windows, where they will be most indicative of their situation, and least destructive of architectural effect. An act of the Corporation is absolutely required to repress the nuisance of signs and street obstructions. After all, a conspicuous architectural front like Stewart's without even a name upon it, is the best mode of distinction, and the most striking advertisement of itself.

P L A T E I.

DESIGN I.—WHOLESALE STORE.

This design is an exemplification of the superiority of arches to square-headed windows, in affording more light, and admitting of being closer together, without producing a bad effect. Till recently, in a few examples, arched windows have been scarcely ever used in this city. The arrangement of arches, in the present example, will be seen to be different from any yet erected. On observation, the central and the two exterior windows of all the upper stories will be perceived to be perpendicular over the centre of the three larger arches below, while the intermediate piers are made into additional windows on the second and third stories. For the sake of variety, we have dropped the intermediate arches on the third story, a strong stone or iron lintel taking their place. The two upper stories requiring less space for light, three slightly narrower windows give a fresh variety to this part. We would recommend this narrowing of upper windows as a good general principle. By making the string-course under the fourth story windows of inferior projection, and stopping against the external quoins of the building, an agreeable variety is given to the composition. The pannels over the arches of the store-front are introduced for the purpose of connecting and harmonizing the divi-

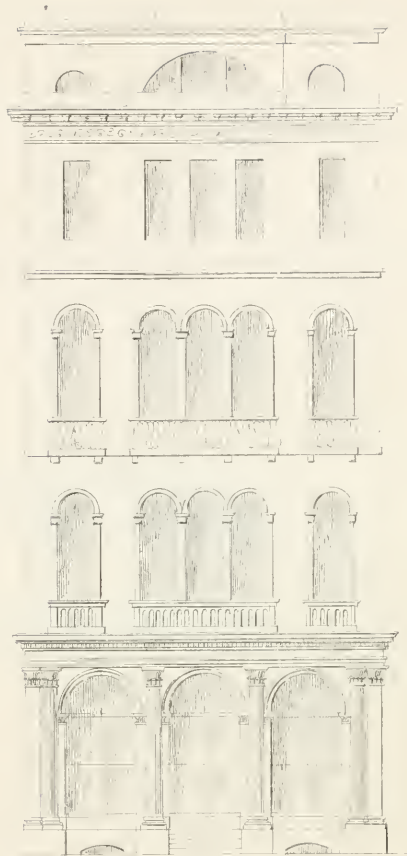


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WHOLE SALE OR RETAIL PRICE

10th 1861

PL. 2

10th 1861

sions of three and five apertures ; as also are the rustic pilasters on the attic story, which serve as well to recal the idea we started from below. This design would look best in red brick and brown stone : the topmost arches are intended to be of brick. A row of three or four warehouses of this design would look better than one alone.

DESIGN II.—STORE.

This elevation, as well as the preceding one, is Venetian in its character, displaying a still richer arrangement of circular-headed windows, mixed with a few square ones, to give relief and variety. A gradation in the height of the stories is observed, which has always a good effect. The first, or the second story from the ground, should be made the highest or principal story. In the present case, the basement that appears above the ground, seems to belong to the lowest story, and inevitably gives it the greatest importance, otherwise we should have given the greatest height to the second story, as the best general rule. Coupled circular-headed windows are not uncommon in Italy, but we do not think they have a good effect : coupled square-headed windows are against all rule and practice in Italian architecture ; all mullions between windows are Gothic in principle. The three lower orders will be seen by the shading to be intended for three-quarter columns ; the two upper ones for square pilasters, projecting about a third of their diameter. This design would look best in white marble, or some light-coloured stone.

PLATE II.

A STORE.

This design is of similar character, but less elaborate and costly than the preceding one. The upper balconies would be of iron, the lower either of iron or stone. The upper windows are purposely kept plain, to increase the effect of the lower, which meet the eye the soonest and oftenest. Though it is the general practice in this city, to place the main cornice of the building over the attic story, yet in a building of as many as five stories, it will generally be found more effective, to place it, as here, below the attic; thus giving the attic story its natural and original place over the regular orders of architecture. The cornice itself is thus brought nearer the eye, and seen to greater advantage; and the otherwise disproportioned height of a building apparently diminished. In point of construction, too, it is preferable; since the weight of the attic wall above counterbalances the heavy projection of the cornice, if of stone, which it necessarily appears to be.

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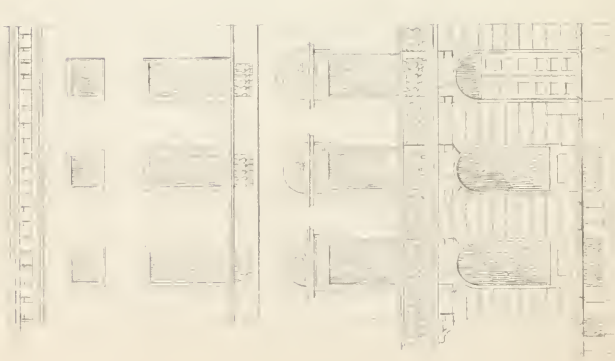
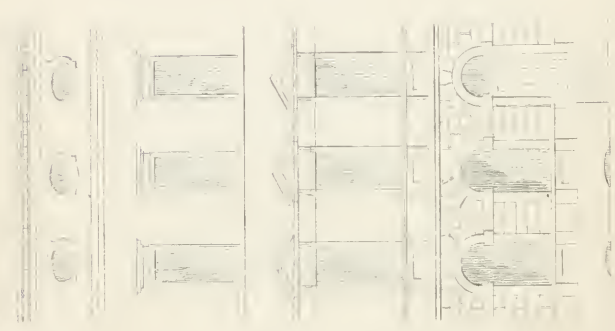
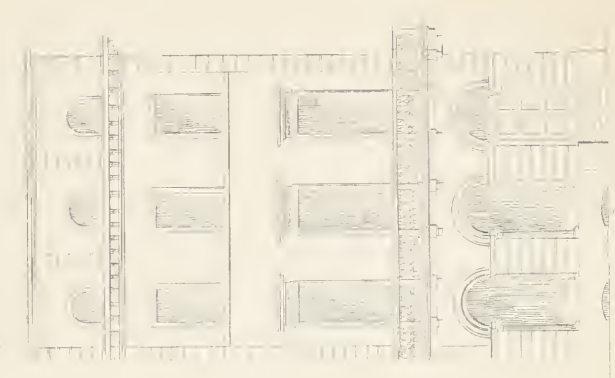


PLATE III.

DWELLING-HOUSES.

In these three designs we have given arrangements of windows and string-courses, that we have not seen previously adopted in this city ; but amid the great number of houses now in process of erection, or built since these designs were drawn, many casual instances of similarity may have escaped our notice. Here, as throughout this work, it will be apparent that the simpler Italian is our favorite taste ; leaving to those who choose to adopt them, the less pure, though more florid examples of the later Italian, the French of Louis XIV. and XV., or the English of the age of Wren. But as our object is not *detail*, but *general design*, any variation of the style and ornament could easily be applied to the proportions defined, and as far as proportion extends, would have an equally good effect.

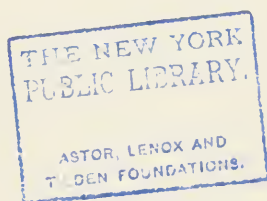
No. 1.—The leading feature of this is the stone balcony over the first story, which in a row of houses forms a striking bond of connexion, as well as a shade and shelter to the windows and door, without requiring any break or projection for a portico, which in a series of houses of the same design we would never recommend.

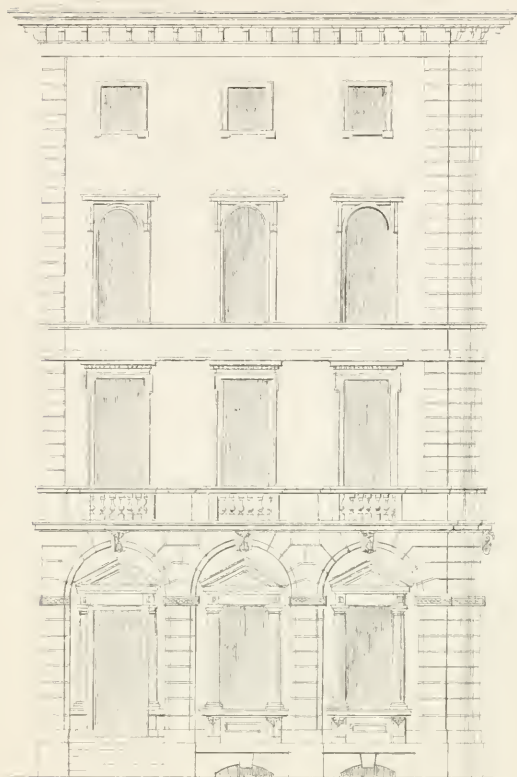
No. 2.—The connected pediment window-heads, and the oval attic windows, are from Venetian examples. The vertical supports under the pediments, and those below

inclosing the pannels, are intended to be inverted ogee brackets. The pilasters and arched dressings to the first story windows and door might be either plain, or with a hollow quadrant edge, projecting one or one and a half inch from the face of the wall.

No. 3.—In the first story windows and door of this example, there is a second recessed arch, with a bed-moulding, under the main architrave, supported by a quadrant column, and a small capital, the mouldings of which die away against the reveals of the window. The rustic quoins are made wider at the external angle to the right hand, those on the left being intended to be like a half-pilaster, which, of course, would be continued to double the width in a row of similar houses.

As the design of a dwelling-house is nothing but an agreeable arrangement of windows and door, a judicious selection from the doors and windows of our other designs without confusing those of different styles, will add to the variety of examples here furnished.





ELEV. OF PUBLIC OFFICES
 at corner of street.



P L A T E I V.

BANK, OR PUBLIC OFFICES.

The grooved quoins, at the angles of this elevation, are common in Italian buildings, and are not only useful for strength of construction, but form a visible perpendicular support for the main frieze and cornice of the building, and a demarcation of the whole composition, whether considered in itself, or in connexion with the adjoining buildings. The Italian mode of making circular corners at the external angle of a block of building, is here introduced ; a similar elevation of five or more windows in width being meant to be continued on the returning side. Circular corners, in general, however, are rather carpenters' and cabinet-makers' contrivances for wood-work, than legitimate modes of construction in stone. With a wide sweep, and with doors and windows in them, we do not think them eligible, either in construction or effect. They tend to weaken the angle, which should be the most solid part of the building, and by placing the central object of the composition at the intersection of the perspective lines of the two sides, attract the eye too much to that most unpleasing point. The outline plan displays the three-quarter columns and pediment heads to the first-story windows, which would have a dignified and massive effect, standing out from the shadow of the arched recess in which they are placed. The sill, on which the columns

rest, is supported by upright inverted-ogee cantilevers. The architrave of the door, projecting forwards, leaves about a quarter column on each side, similar to the window dressings. The quadrant hollow at the angles of the arches and piers has a good effect in execution ; but the *caps* of the piers are intended to be square-angled. The upper windows are intentionally made plainer, and subservient to the principal story.

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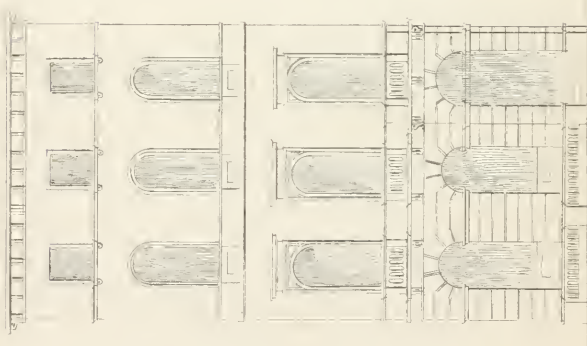
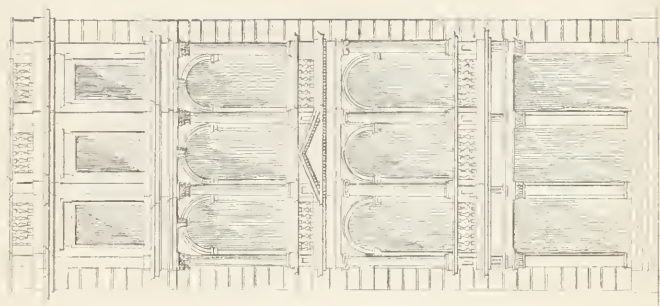


PLATE V.

DWELLING-HOUSE.

Here we have endeavored to show what may be done by simple outline, without ornament. We do not say that architectural is like *female* beauty, "when unadorned, adorned the most;" but, unless the simple outline is good, all ornament only strives to hide the absence of form and proportion. We should not advise so many stories of circular-headed windows, unless varied by square cornices, as in the present instance.

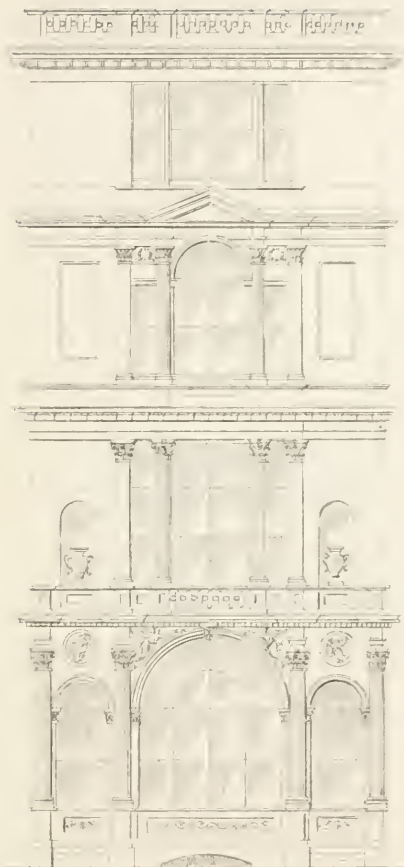
STORE.

Where much light is required, this is an eligible mode of grouping together three wide windows into a central composition, relieved by a wide space of plain wall on each side. We should not approve of this arrangement, however, in a composition wider than a single street building. The two upper ranges of columns and the pediment might be omitted, and the piers and arches only retained, and the effect would be nearly as good. In that case, pannels might be required to take off the heaviness of the piers, and ornaments might be introduced into the spandrils of the arches; and, as we have elsewhere stated, it would be well suited to cast-iron work.

PLATE VI.

RETAIL STORE, OR ICE-CREAM SALOON.

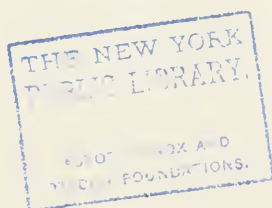
We have here aimed at an *external* richness of decoration, suitable to the lavish magnificence which is now bestowed on the *interiors* of these favorite resorts. This design should be executed in white marble. Open intercolumniations here form *one* grand central window ; which case is an exception to our general objection against a series of such windows. The solid perpendicular bearing of the external pilasters of the second and third story over the middle columns of the first, counteracts the merely apparent weakness of the upper columns resting within the springing line of the main arch ; while the two side arches, and the niches above them, tend to give breadth and support to the composition below. The horizontal lines of the entablatures of the several orders are necessarily carried across the building, to preserve solidity and connexion between the solid and void parts of the front, and also to counteract the otherwise too prevalent perpendicular lines, formed by the columns and pilasters. The style of this design may be called Greco-Roman ; some of the details having been suggested by the later Romanized remains at Athens.



RETAIL STORE, P
COLUMBIA, ILL.

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BANK OR PUBLIC BUILDING



3 L. 11.

1/8" scale

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PLATE VII.

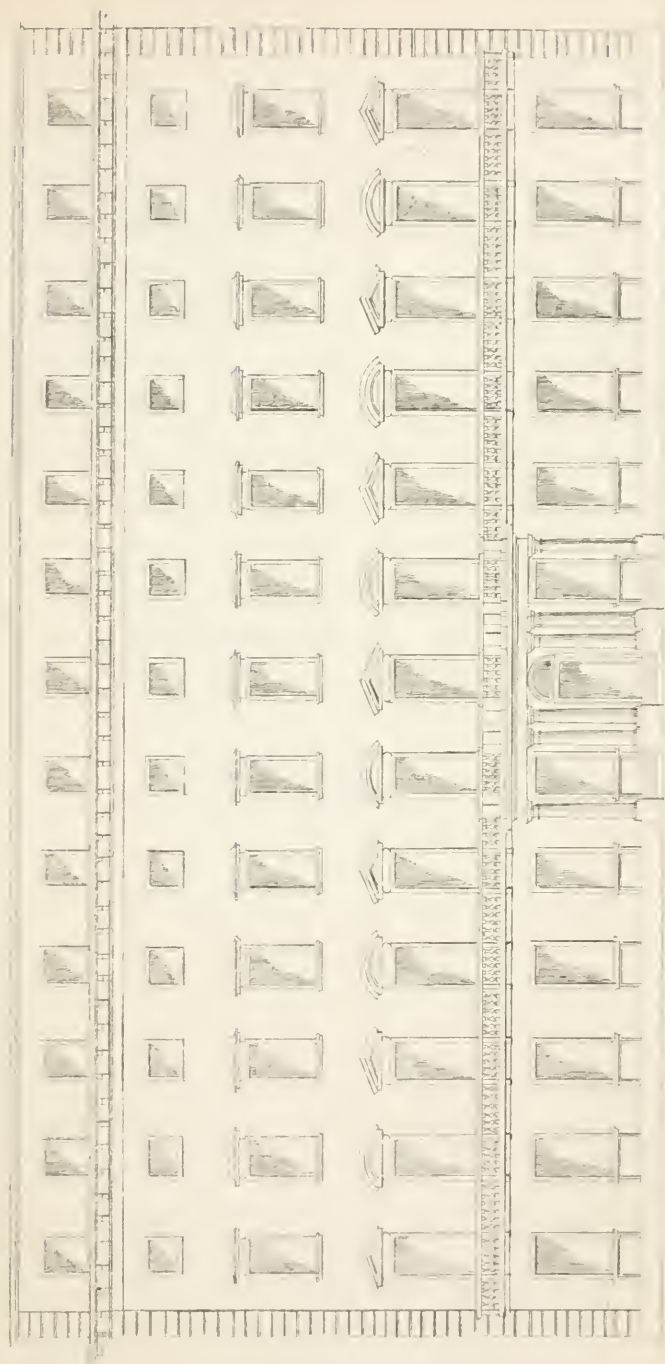
BANK, OR PUBLIC BUILDING.

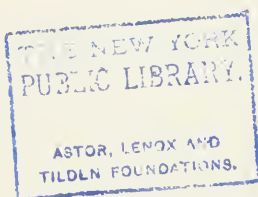
The Palladian style has been here adopted, which, though little used, has left behind it some of the finest monuments of art in Italy and England, and been followed by architects of the greatest genius, from Inigo Jones, Wren, and Kent, to Chambers, Wood of Bath, and Gwilt. Simplicity and purity are the characteristics of this style. This building would look well in red-brick and sandstone, or in white marble and yellow Buffalo brick; a mixture we have not yet seen adopted, but venture to say, would have a good effect. The Venetian window is intended to be in a slight recess, with a bed-moulding under the arch. A string-course is generally advisable over arched windows, as it gives a demarcation and definite form to the space above them, and increases the effect of the arch itself. In this case, the keystone forms a connecting link between the arch and the string-course above it. The pediment to the centre window of the third story is intended to form a triangular pyramidal group with the lower pediments. Windows might be placed in the pannels of the attic story, if desired.

PLATE VIII.

HOTEL.

No one that has rambled through the streets of Rome can have failed to observe the grand and beautiful effect produced by a long range of large and well-proportioned windows, placed *at equal distances* on an otherwise plain wall, without a break. The cause of this is attributed by Burke, in his Essay on the Sublime and Beautiful, to a principle he calls the “artificial infinite :” that is to say, the deceptive idea of unlimited succession produced on the eye by a continued vista of columns, trees, &c., *at equal distances*, that, if sufficiently long, seems to vanish into the point of sight. In the same way a bell regularly tolled, or a constant pouring of rain, seems as if it never would leave off. But if the series is once interrupted by a break, the illusion is dispelled. This should teach the architect the injudiciousness of making vertical projections and compartments in street fronts, which are chiefly seen in an oblique view, as they destroy the continuity and apparent extent and grandeur of the building. In a building of moderate extent, apertures are best placed at equal distances, without grouping. In the present design a portico or door in the centre is absolutely necessary ; but a wider central window in the upper stories would only break the composition into two pieces, and destroy all the beauty otherwise obtained. To be convinced of this, the





reader has only to hold the engraving up sideways to his eye, and imagine the effect of the supposed alteration.

The balcony is intended to project two or three feet along the building, except where it meets the parapet of the portico ; which should project about five feet, with steps on the returns. By placing the principal cornice under the attic windows, the excessive height of a building is apparently reduced, and a better proportion of the general front obtained. The sills of the lower windows are supported by inverted ogee brackets, rising from the plinth. As stores on the ground story of a hotel materially detract from its beauty, it would be far preferable to place the narrow end of such buildings on the principal street, with an entrance there in addition, and let the longest front be situated in a private street, as contemplated in the present design.

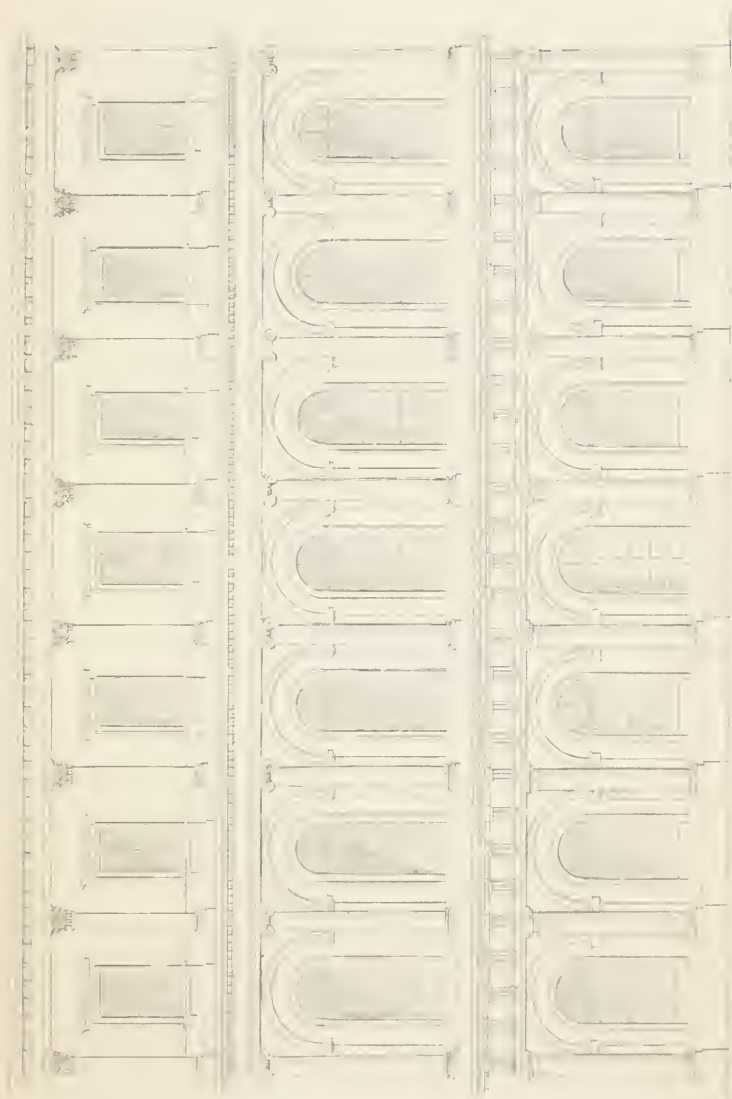
PLATE IX.

PUBLIC LIBRARY, OR INSTITUTION.

This façade, as the connoisseur will perceive, is imitated from the Colosseum, one of the few examples of *order above order* left us by the ancients; and which, from its uniting the orders with piers and arches, may be said to be the model of the modern Italian style. We believe Palladio was the first who made a direct study from that edifice, in his uncompleted Academy of the Fine Arts at Venice. The celebrated Wood of England put forth a subsequent adaptation of it in his Circus at Bath, which the testy Mr. Bramble, in "Humphrey Clinker," unable to find any other fault with, stigmatizes as "only the Colosseum, turned inside out."

In the present elevation, the two lower orders would be three-quarter columns, and the upper one, pilasters projecting about a third or fourth of their diameter. The face of the two upper orders may be set back a little progressively behind the lowest, and the wall diminished in thickness at each story, though in the two angular profiles shown, the columns, of course, stand perpendicular over each other's centre. The recess of the arches and window reveals should be nine inches or a foot, according to the scale on which the design may be executed.

If this elevation were applied to a library, the plan might consist of an entrance-hall and passage in the centre,



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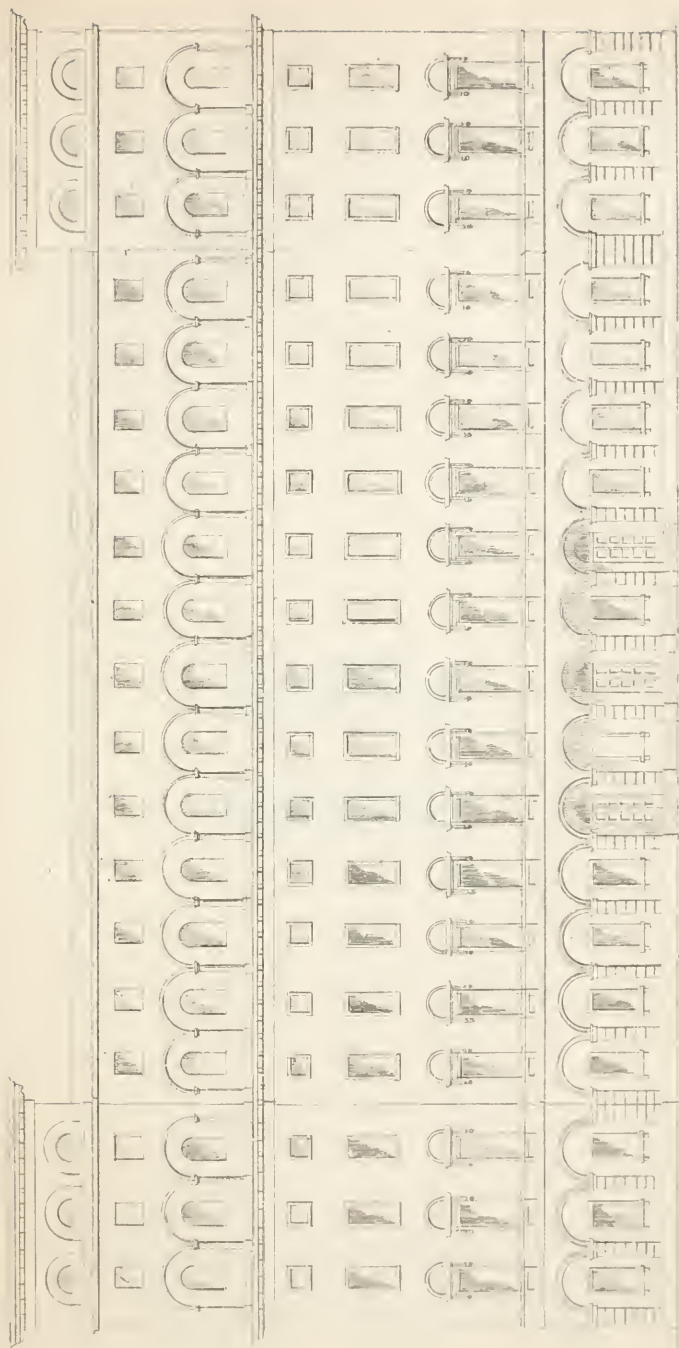
and a staircase built out in the middle of the back front, and four reading and librarians' rooms on the first floor ; while, above, the whole area over the four rooms and passage would be thrown into one handsome Library, of two stories of windows in height, divided vertically by a gallery, running round the whole room ; and as the front windows would be sufficient for light, all the rest of the walls might be covered with book-shelves ; while the columns or pilasters projecting into the room to support the gallery might be the termination of partitions, at right angles to the walls, also covered with shelves on each side. The ceiling should be an oval arch, or coved at the angles.

PLATE X.

HOTEL.

This is an attempt to raise six or seven stories, without making the windows resemble a multiplication-table, or the meshes of a piece of basket-work. We have elsewhere pointed out, that the only way to avoid this, is to employ string-courses or cornices between some of the stories.

In the present case we have placed our main cornice over the fourth story, effecting, by this means, a division of our entire front up to this cornice, so far complete and well-proportioned in itself. Our two upper stories would thus seem to be an after-thought or addition over the lower ; but are prevented from appearing heavy by the use of light semicircular half-columns and arches. By adding one more story over the slightly projecting ends of our building, which should be returned the whole depth of the rear, the height of the intervening part of the building is apparently reduced by contrast ; a triangular disposition of salient points is formed in conjunction with the centre recessed portico ; and the whole composition relieved from the monotony it would otherwise possess. Deducting all above the main cornice, and diminishing the height between the first and second story windows, this design might be easily converted into a row of dwellings, or the side of a *square* ; in which latter case, the additional story in height, at the two end-houses of the block, might be advantageously retained.



24-25, 26, 27, 28, 29

H O T E L

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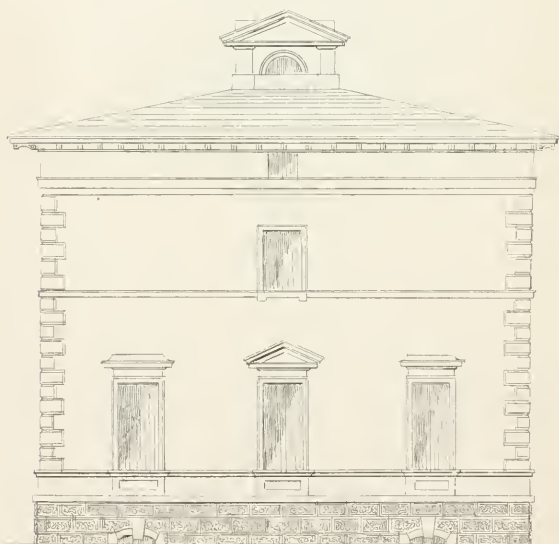
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Front

DETACHED MANSION

16th scale



PL. XI.

Side.

PLATE XI.

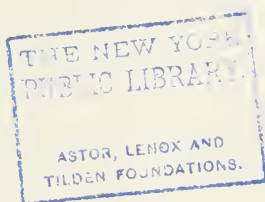
DETACHED MANSION.

This example is of the simplest Italian character, and would equally suit a suburban, or a country villa, with the addition of a colonnade on one side, surmounted by a balustrade and vases over the piers, and a flat roof to walk out upon from the second story window, which might be made lower for that purpose. The recessed portico, about one intercolumniation deep, should have a groined ceiling, of square and diagonal lines on the plan, and semi-circular on the section. The chimney flues could be conveniently gathered up into the corner piers of the *belvedere*, and the shafts raised higher, if required. For a country-house the basement might be lower, or omitted, except when required for cellarage; or, if the basement were kept, the attic story might be dispensed with.

PLATE XII.

DISTRICT SCHOOL, OR ACADEMY.

The style of this design, the Gothic of Henry VIII. or the earlier Elizabethan, is that which we think the most appropriate for educational structures. It should be built of red brick and brown sandstone ; the corner-stones and mullions *flush* with the brick-work : *projecting* architraves are contrary to the nature of Gothic architecture. There is a small building of this style and material in the neighborhood of Lexington Avenue, which will give a notion of the agreeable effect produced. The plan of the front shows a cloister in the centre, for play and exercise during the intermission of the classes, intended to extend the whole depth of the building, and serving for a sheltered entrance to the school-rooms on the first story, and the stairs leading to the upper stories. Larger windows to the first floor rooms might be obtained on the back and sides of the building. The second floor would afford three or four large class-rooms ; the third story as many more. Winding staircases in octagonal towers, are the most in character with Gothic designs ; and, with two other similar ones on the back front, separate for boys and girls, built of stone or cast-iron, the steps forming a pillar in the centre, nothing could be more durable, or safe against accident of any kind.

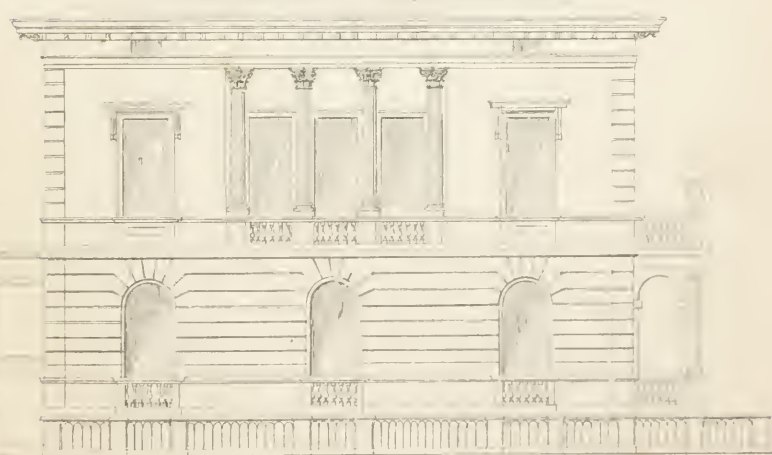
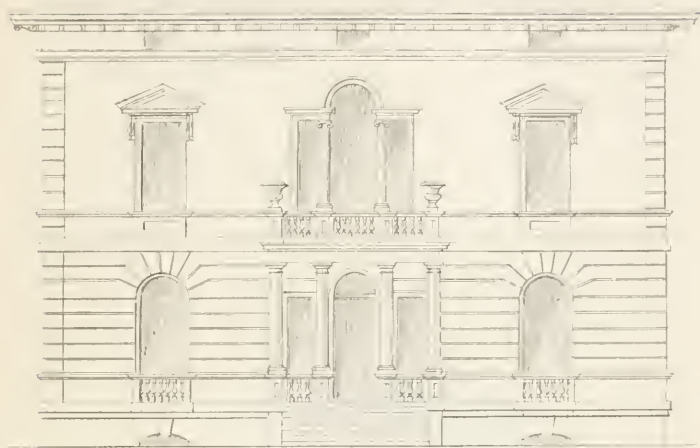


With the necessary modifications of plan and arrangement, this design might easily be turned into a handsome villa, with a recessed portico, where the centre cloister now is ; and built of the same materials ; one of the staircases, of course, omitted as unnecessary. Uniformity in rural buildings is not so effective as an irregular and picturesque disposition.

P L A T E X I I I .

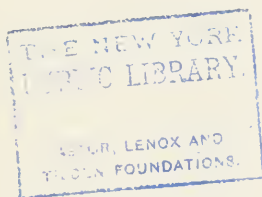
DETACHED MANSION.

This is intended for the corner of a street, where access could be obtained through the archway to the stable-yard, shown in the side elevation. Jersey sandstone and red brick would be suitable materials, but white marble would be more elegant. The recessed portico on the side upper story might be adorned with flowering shrubs in summer, or enclosed as a greenhouse in winter. A plan, to suit any particular requirements, could easily be made to correspond with these elevations. If the attic should be thought too low, a balustrade over the entablature, with windows behind, and a flat roof, might be substituted for the Italian villa roof here adopted ; the entablature, in that case, being a little reduced in height.



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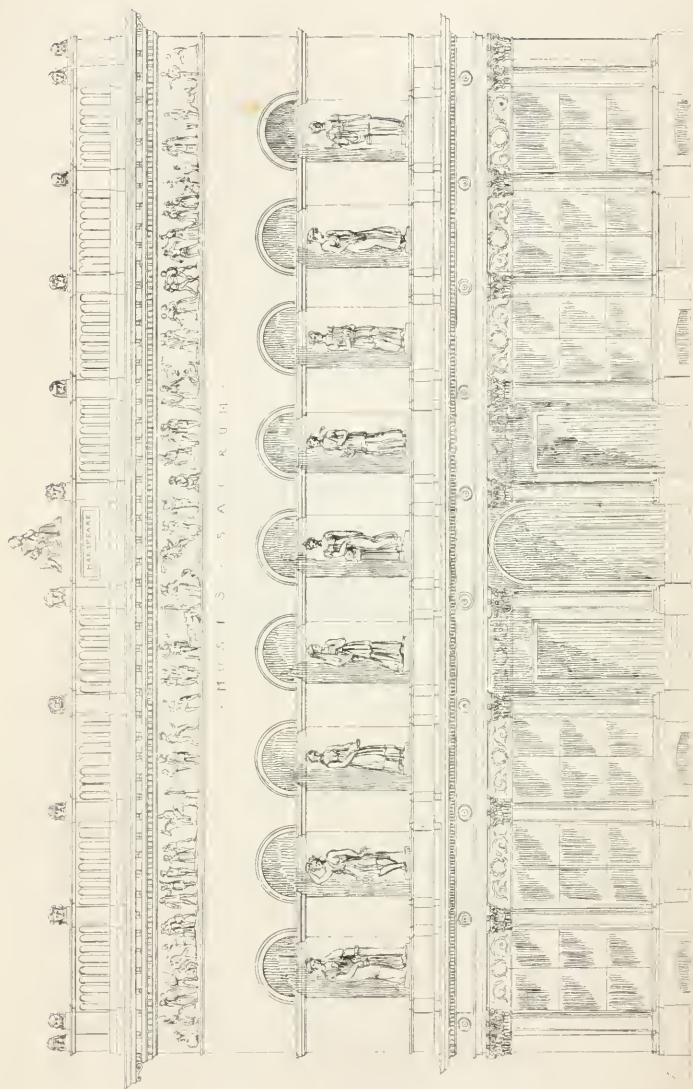


PLATE XIV.

THEATRE.

In all compositions of the Fine Arts, it is good to have, whether consciously or unconsciously, some leading idea, from which all the subsidiary parts will naturally branch out, and insure unity and consistency as the result.

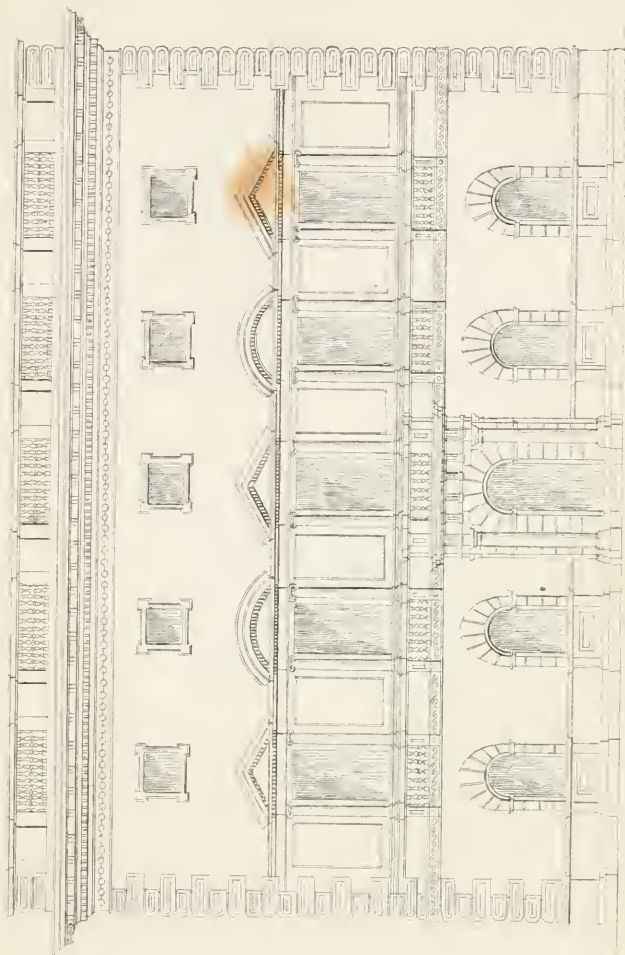
The leading idea of this design was obviously to exhibit the statues of the Nine Muses ; the motto referring to which, if thought pedantic, might be omitted. The required number of niches regulated the width of the building, the intercolumniations of the order, and the proportions of the whole design. The plan of the niches is meant to be semicircular behind the statues to the top of the impost, but the recesses of the arches over the semicircular windows to be rectangular. As these windows would be all that are required to light the saloon by day, the space above them has been devoted to a *basso* or *alto-relievo*, representing the principal characters of Shakspeare, with a balustrade, cornice, and comic and tragic masks as *acrotéria*, crowned by a statue of Shakspeare in the centre ; in a sitting posture in order to harmonize with the wide base furnished by the centre tablet. The three centre intercolumniations would open upon a recessed portico, leading to the several entrance doors. A handsome store might occupy the remaining space on either side. The two centre columns would be, of course, entire ; the remainder three-

quarters, or entire columns, just clear of the window-frame. The rich frieze between the capitals is intended for open iron-work with glass behind. The names might be written below the statues, beginning from the left in the following order : Clio, Terpsichore, Calliope, Melpomene, Urania, Thalia, Polymnia, Erato, Euterpe ; which have been designed with characteristic emblems and attitudes.

This design, owing perhaps to the quantity of sculpture, has turned out somewhat in the *Parisian Greek* taste.

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CLUB-HOUSE & PENTHOUSE

PLATE XV.

CLUB-HOUSE, OR PRIVATE MANSION.

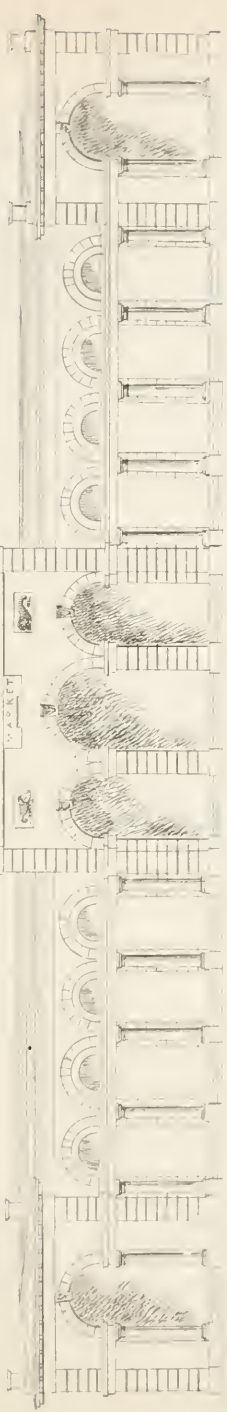
The central range of windows in this design is imitated from the Pandolfini palace at Florence, attributed to the invention of the "divine Raffaello." This early Italian style, for solidity, richness, and palatial dignity, we consider as the *ne plus ultra* of Art. Several of the London Club-houses, recently built after this manner, have attracted great admiration; as nothing of the kind had ever been previously introduced. The lower windows, also Florentine in form, have been kept smaller, on purpose to add to the importance of the principal story. An attic might be made, with windows concealed behind the balustrade, if desired. The portico should not project over two or three feet, enough to give room for a half-pilaster on the return, set back from the angle of the portico at least as much as the space from the angle to the half or three-quarter column. The quoin-stones are chiselled out into flat sinkings and torus projections alternately round each stone. The ends of the brackets level with the ornamented string-course, under the principal windows, must project sufficiently to bear the three-quarter columns of the window-dressings above. Square windows, of equal height and breadth, are, in general, the best that can be chosen for the highest story under the principal cornice.

PLATE XVI.

A MARKET.

This design is meant to be extended considerably wider than the limits of the plate allowed, by increasing the length of the colonnade between the wings and the centre building. The entire plan would be a parallelogram, the roofed part forming a double H, of which the front part, shown in the plan, would be the longest side, the centre and wings extending back to a similar elevation on the opposite side ; and the interior and exterior side-elevation of the wings would have similar piers, arches, and windows, to the part in fainter lines behind the colonnade, which represents the cross-bar of the H connecting the wings and centre. The stalls, which would have one window each, are shown by dotted lines on the plan. The centre would be the meat market, and the two wings, and the ranges connecting them with the middle of the meat market, might be for vegetables and country produce. Other stalls might be placed under the colonnades, and the four open courts they inclose. An additional story might be raised over the meat market, if required. But we must enter our strong protest against making many upper stories over a market-house, as it has been lately proposed at the Washington market ; it appearing to us that living-rooms, or even coffee-houses and miscellaneous stores, associated with accumulated stocks of provisions

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A MARKET

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liable to decay, must be inimical to the purity of atmosphere, and cleanliness necessary to such distinct objects.

An India-rubber cloth awning might be contrived to shelter the open courts from rain and sun in summer, and from rain and snow in winter. Chimneys are drawn at the ends of the wings for stoves, one for every two stalls.

The present design is perhaps best suited for an up-town market, though it might easily be enlarged. Several designs for markets in the Italian style, lately executed in London, may be consulted with advantage. Liverpool, also, possesses the largest covered market under one roof ever erected.

PLATE XVII.

FERRY-HOUSES.

While the means of transit over our numerous ferries have been brought to such a degree of perfection in this city, that a bridge, if possible, would be less cheap and convenient, we may be surprised that there should not be a ferry-house yet erected of the smallest architectural pretensions. Simple in their plan, of only one story or order in height, few subjects present greater capabilities, and scope for fancy ; at the same time that a variety of the most appropriate models may be searched out among the beautiful lodges and gates to English noblemen's Parks, or the triumphal Arches and Propylæa of antiquity.

Design 1, is purposely made of the exact plan of the one first made at Vanderbilt's landing, Staten Island : and shows at what little extra expense two carpenters' sheds, four square posts, and a flat roof, may be converted into a piece of architecture. Although we object in general against all sham imitations of stone in wood-work, yet a ferry-house, not being a permanent structure, resting on an artificial foundation, and liable to the constant jars of the boat, may be excusably built of joiners' work. If a double carriage-way were desired, this design might be extended by inserting an additional *vide* intercolumniation, and a column in the centre might be exceptionably excused on the ground of utility. The back part of the



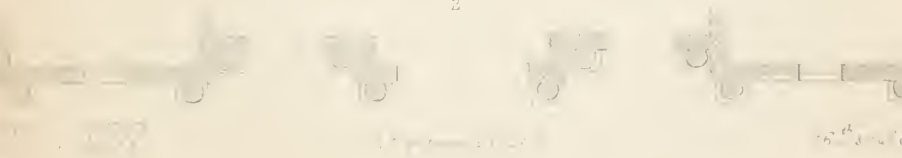
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FERRY - HOUSES



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plan would be the counterpart of the front ; and the centre part is intended to be roofed over in both designs.

Design 2. A richer elevation, to a more extended plan. This could also be modified so as to have two carriage-ways, by substituting three arches of equal width, a little loftier in proportion to the aperture ; one side arch serving exclusively for foot-passengers.

We may here hint at the importance of a maritime city, with such an immense extent of water-front, paying some attention to the handsome appearance of her warehouses, and other buildings next the wharf ; which form the nearest objects in a distant view of the city, and give the all-important first impression to foreign visitors ; while they furnish the only opportunity of viewing in conjunction the beauties of civil and naval architecture, or of realizing the sea-port pictures of Claude and Vernet.

PLATE XVIII.

ENGINE-HOUSE.

As the simplest structure is susceptible of pleasing and characteristic embellishment, we have here selected for our subject an engine-house, of which the general specimens are little superior to stable-buildings ; and, by the addition of Sculpture, which might be omitted till the occasion demanded, have endeavored to compose something like an adequate architectural tribute to the meritorious Fire Department. As windows would interfere with this object, they must be supplied from the back or sides, or a skylight in the upper story. The plan and elevation seem sufficiently explicit, except in denoting, that the entablature between the columns, and the face of the wall between the pilasters above, are intended to stand about half the projection of the columns forwarder than the general line of the front ; thus affording greater depth for the niches and statues. The appropriateness of the flame at the top of the pediment, the trophies of caps and trumpets, and the oak-leaf crown, the Roman reward for saving the life of a citizen, will be readily appreciated. The lion's head, in the keystone, was emblematical of water among the ancients, and used for waterspouts on their temples ; their most rainy period being when the sun was in the constellation of *Leo*. The *alto-relievo* represents a fireman just descended from the ladder, after having rescued an infant,



ENGINE HOUSE

PL. XVII

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and restored it to its mother's arms. Should such a design as this be erected, it would not be long before some similar instance of heroism might demand and obtain a similar monument ; justly bestowed on those

Qui sui memores alios facere merendo.

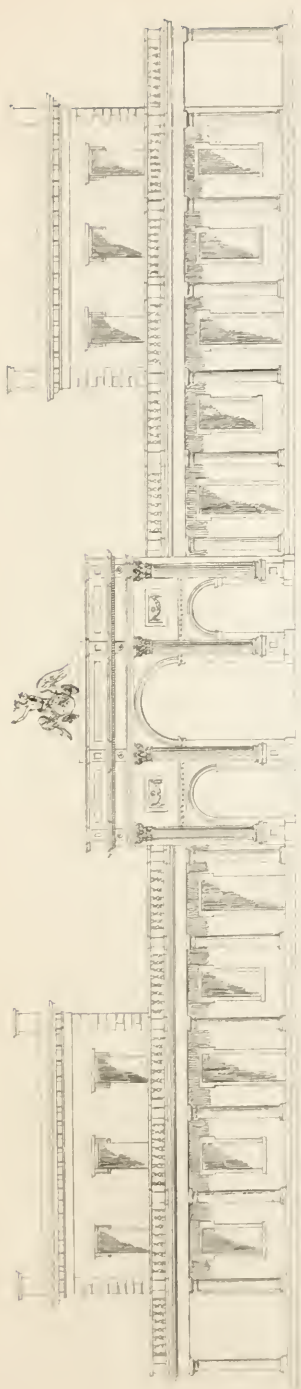
Who by desert have won a glorious name.

PLATE XIX.

RAILROAD TERMINUS.

A handsome structure of this description has, we believe, been recently erected at Baltimore, of which this city can not yet boast. A design of this extent would only be suitable for an up-town situation, which however is fast becoming the most central and convenient for the purpose. The plan exhibits a waiting-room and office, with living rooms above, and a colonnade in front, on each side of a centre archway, through which carriages might drive into the interior courtyard. The depot for cars might be placed centrally behind the arch, with a cast-iron roof, forming one wide pediment over the two tracks ; thus uniting the whole into one pyramidal composition. As some piece of Sculpture appeared necessary, in lieu of the triumphant hero, horses and chariot of the antique arches, we conceived the idea of introducing the figure of Mercury in a winged car, emblematical of Commerce, conveyed over the world, without animal agency, with the rapidity of the wind.

One of the side buildings detached, and extended to four or five windows in width, and the colonnade, carried round three sides, might be easily converted into a simple Italian Villa, with the addition of vases over the piers of the balustrade. The upper windows will be observed to have brackets and cornices, but without architraves on the



SECTION OF THE TEMPLE

20 feet 6 inches



SECTION OF THE TEMPLE

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sides. We would strenuously advocate this mode of window decoration in all cases where the piers are not visibly wider than the windows, as it has a good effect in itself, as may be seen in the Metropolitan Hotel, and increases the apparent width of the pier. Where cast-iron ornamented lintels are used, they should always have small brackets, or blocks to support them, where they bear upon the wall.

PLATE XX.

A CHURCH.

Several very tasteful and picturesque Gothic Churches have lately been built in the upper part of New York City, but too closely pressed upon by houses, and of too rural a style of Gothic, to obtain their full effect. Instead of the affectation of planting ivy, the badge of antiquity, on a new building, if two or three large trees could have found space to separate them from the adjoining buildings, they would be greatly improved. In seeking something that would better harmonize with modern street architecture, we were led to this design of an Italian Chapel of moderate size. The columns between the arches are merely ornamental additions, to give the degree of richness demanded by a city edifice: if they were omitted, the design would be very suitable for a suburban, or village church, and might be very economically built, of stone or wood. The Italian *Campanile*, or bell-tower, rises square for a considerable height, like most of Wren's best steeples, and terminates with an open belfry, square, octagon, or circular on the plan. It offends symmetry, but secures picturesqueness, to place a steeple or tower on one side of the body of the church. The best steeples will be found to be those that cut the sky with the boldest and most striking profile. To test this effect, it has been recommended to the artist to cut them out in paper, doubled



A CHURCH

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up in the centre line, which, when opened, will exhibit the outline of both sides. In steeples, sudden and rectangular breaks and diminutions best suit the Roman and Italian styles, and gradual taperings the Gothic.

The side windows of this design should be circular-headed, of smaller diameter than the arches of the portico, but the arches on the same springing-line; the impost being continued level round the building. A semicircular or elliptical recess for the altar, or pulpit, might be made at the opposite end of the building, with a semi-dome above it, the springing-line of this also level with that of the windows. The ceiling might be an elliptical arch from side to side, with projecting ribs over the piers of the windows, and pannels between: or such a ceiling might be painted in distemper. A staircase to the gallery, and a small robing-room, might be obtained in the lower part of the tower.

Though for the sake of novelty we have given our only example of a Church *in this style*; yet we have no hesitation in stating our preference of the *Gothic* style for churches, in most instances. But it should be remembered, that costly ornament is more indispensable in the Gothic style, than in any other. For our own part, we do not approve of the revival of Norman, or Lombardy Gothic, as too rude, and mock-antique. The early English is our favorite style of Gothic, and requires least ornament of any. But the misfortune of all modern Gothic churches is the difficulty of arranging the interior so as to secure the general sight and hearing of the preacher. Pillars, so essential to beauty and utility, are thus found inconvenient, and length must be equalized with breadth of build-

ing. Now the elements of beauty in a Gothic interior are its length and height. Without height, there can be no approach to sublimity of effect, and, without sufficient length, height cannot be perceived in the perspective. Modern Gothic churches are too *square* in the interior, and *squat* on the outside; while the beauty of the old Cathedrals and College Chapels is to be tall and extended; aspiring, and "pointing to the skies." Unless, therefore, some degree of these real beauties is obtained, it is idle and puerile to ornament doors and windows with quatrefoils and crockets. But where economy is not an object, and for a moderate size we should recommend a Church of the early English, College Chapel form (without a tower), from 150 feet by 50, to 100 by 33; in the latter case with only an *end* gallery, in the former with side galleries of only two piers in depth, supported by brackets. The ceiling should be of simple Early English groining, (of plaster to imitate stone,) supported by three-quarter columns between the windows; or if of wood, of two slightly-inclined planes, divided into square pannels by moulded beams, with bosses at the intersections, and with quadrant-arched spandrils and pendants against the walls. The windows, in the latter case, should be four-centred arches with mullions and plain tracery; in the former, narrow lancet arches, without mullions. The height of the building should be at least half as much again as the width, if in the early English style, somewhat less in the latter. Four narrow octagon turrets, at the angles of the building, graduated buttresses between the windows, an entrance door at the end, and a wider window above it, and a gable roof corresponding to the pitch of the

ceiling, would complete a plain but effective exterior, in either of the above styles. For a village church of this form, and much smaller dimensions, squared coins, coping, and mullions, and rough irregular stones between, would look the best. If side galleries were omitted, by placing the pulpit against the wall, about one third of the length of the building from the altar-end, the preacher would be the most central and opposite to his audience.

THE END.

